



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/877,164	06/08/2001	Ronald D. Ringleben	NAC/108	9298

26875 7590 09/29/2003  
WOOD, HERRON & EVANS, LLP  
2700 CAREW TOWER  
441 VINE STREET  
CINCINNATI, OH 45202

EXAMINER

LUDLOW, JAN M

ART UNIT	PAPER NUMBER
----------	--------------

1743

DATE MAILED: 09/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Applicati n N .

09/877,164

Applicant(s)

RINGLEBEN ET AL

Examiner

Jan M. Ludlow

Art Unit

1743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.


### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____.  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2</u> . | 6) <input type="checkbox"/> Other:  |

Art Unit: 1743

 1. The IDS <sup>filed</sup> ~~filed~~ January 15, 2002 is referred to as supplementary, but it is the only IDS of record. If there was an earlier filed IDS, applicant is requested to resubmit it for consideration.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

Art Unit: 1743

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1, 7-8, are rejected under 35 U.S.C. 102(b) as being anticipated by Henry (4956150).

Henry teaches a testing container used as a row in a microtiter plate with sidewall 31 and a bottom wall with continuous wall portions angling up form a round bottom

7. Claims 2-4, 14-17, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henry.

Henry fails to teach the number of wells or pipetting form the container.

It would have been obvious to provide more wells to conform to known microtiter formats in order to simultaneous perform more tests in a single test piece as was known in the art. It would have further been obvious to pipette from the microtiter wells in order to provide further testing or recover products from microtiter wells as was known in the art.

Art Unit: 1743

8. Claims 1, 2, 5, 7-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Kedar et al (6083761).

9. Kedar teaches a well plate with a plurality of wells, each including a circular bottom and four substantially triangular sidewalls on the bottom wall of the well plate, and a plurality of upper vertical sidewalls between the wells defining a volume. See, e.g., Figures 8A-8B. A multi-head pipette is used to transfer fluids from the wells as shown in Figure 6. A 96 well embodiment is taught (col. 15, lines 40-55), but other configurations compatible with standard well plate manipulation devices are suggested. With respect to claim 8, the edges are rounded in that they are circular.

10. Claims 3-4, 14-18, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kedar.

Kedar fails to explicitly teach the number of wells, or removing all of the fluid volume from the wells.

It would have been obvious to make the well plates of Kedar with standard numbers of wells for use with standard equipment as taught by Kedar. It would have been obvious to remove all the liquid from the wells in order to assay the complete sample as was known in the art.

11. Claims 1-6, 8-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Oldenberg (6027695).

Oldenberg teaches a well plate having sidewalls 4 and bottom wall 3. The bottom wall includes plural recesses which are shown in Figures 2-4 to have four substantially triangular sidewalls and a square bottom. The wells meet at rounded

Art Unit: 1743

edges (Figs. 3 and 5) to prevent fluids from sitting on walls between the wells. Other shapes of wells are contemplated (Col. 6, lines 15-47). The device has 2400 or 9600 wells or other number of wells and is made the same size as conventional microtiter plates (Col. 5, lines 33-60). With respect to claims 2-4 and 10-12, the number of wells is taught (i.e., 9600 wells "comprises" 96 wells, plus an additional 9504 others) and it is the examiner's position that since the number of wells taught by Oldenburg is a multiple of the numbers claimed and the device is made the same size as a conventional microtiter plate, some of the wells will inherently have the same center to center spacing as the multipipet heads claimed.

12. Claims 7, 13 and 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oldenburg as applied to claims 1-6, 8-12 above, and further in view of Kedar.

Oldenburg fails to teach round bottoms or pipetting.

The teachings of Kedar are given above.

It would have been obvious to provide round bottoms in the wells of Oldenburg in order to provide a different shaped bottom as taught by Oldenburg, such circular shape being suitable for four sided wells as taught by Kedar. It would have been further obvious to pipette out of the wells of Oldenburg in order to effect transfer of fluids for testing as taught by Kedar.

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 1743

14. Levin et al additionally teach a reservoir 1408 with walls (shown in Figures 14-15) surrounding bottom wall 1430 with recesses 1432 having contiguous angled wall portions and round bottoms (Figures 27-28). Pipette tubes extend into the wells and gas pressure is used to force the fluids up through the tubes (col. 20, lines 30-34).

15. Homola teaches a reservoir tray for use with a multi tip pipette.

16. Griffin (5456360) does not teach the instant invention because according to drafting convention, the bottoms of wells 66 are open (i.e., there is not a crosshatched solid wall shown at the bottom, but a line representing the end of the sidewall), and therefore the walls and bottom of Figure 9 are not configured to contain a fluid volume.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jan M. Ludlow whose telephone number is (703) 308-4039. The examiner can normally be reached on Monday-Thursday, 11:30 am - 8:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on (703) 308-4037. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Jan M. Ludlow  
Primary Examiner  
Art Unit 1743

Jml  
September 22, 2003